

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

**Applicants:** K. AOTA, et al.

**Application No.:** Divisional of U.S. Patent Application Serial No. 09/820,231, filed March 18, 1997

**Filed:** On even date herewith

**For:** FRICTION STIR WELDING METHOD AND STRUCTURE BODY FORMED

**Art Group in Parent:** 3635

**Examiner in Parent:** R. Canfield

**INFORMATION DISCLOSURE STATEMENT**  
**UNDER 37 CFR 1.97 AND 1.98**

Assistant Commissioner for Patents  
Washington, D.C. 20231

June 23, 2003

Sir:

Pursuant to Applicants' duty of disclosure, enclosed please find a List, on a form substantially equivalent to Form PTO-1449, of documents cited in connection with prior applications of the above-identified application, as well as documents cited in connection with the present application and enclosed herewith. The prior application of the above-identified application, in which various of the documents on the enclosed List have been cited, is prior Application No. 08/820,231, filed March 18, 1997.

The documents being submitted herewith are the following:

- a. "Welding and Material Fabrication", January 1995, Vol. 63 No. 1 (front page, page 1 (contents), pages 13-16);
- b. JP No. 7-505090 (6-8-1995)
- c. JP No. 6-106661 (4-18-1994)

- d. "VERK Ständerna", February 1996 (front page; page 3 (table for contents); page 5; pages 32-34)
- e. "Sventsaren", Vol. No. 3, 1995 (front page; contents; pages 5-6)
- f. "Light Metal Vehicle Committee Report" (1978-83), 7-15-1984 (front page, pp. 194-5, colophon page, back pages)
- g. 27<sup>th</sup> ISATA (1994), pages 422-31
- h. "Welding Operation Management Safety Sanitation", 5-10-1978 (front page, content page, pp. 26-7, colophon page)

To the extent that the listed documents were cited in connection with prior Application No. 08/820,231, which is being relied upon under 35 USC §120 in the above-identified application, copies of the listed documents are not enclosed. See 37 CFR 1.98(d).

This Information Disclosure Statement is being submitted concurrently with the filing of the above-identified Divisional application. Accordingly, requirements of 37 CFR 1.97(b) are clearly satisfied.


Note that various of the listed documents, which were previously submitted in Application No. 08/820,231, are discussed in Information Disclosure Statements submitted in No. 08/829,231. Reference to these Information Disclosure Statements for discussions in connection with, for example, references not in English, is respectfully requested.

In view of all of the foregoing, it is respectfully submitted that all applicable requirements of 37 CFR 1.97 and 1.98 have been satisfied, in connection with all documents on the enclosed List. Accordingly, consideration of the listed documents, upon examination of the above-identified application, is respectfully requested.

Kindly charge any additional fees due, or credit overpayment of fees, to  
Deposit Account No. 01-2135 (Case: 503.35255VX2).

Respectfully submitted,

ANTONELLI, TERRY, STOUT & KRAUS, LLP

By   
William I. Solomon  
Reg. No. 28,565

Attachments: Form PTO-1449

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Substitute for form 1449A/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>	
		Application Number	Not Assigned Yet
		Filing Date	On even date herewith
		First Named Inventor	AOTA, KINYA
		Art Unit	3635
Examiner Name	R. Canfield		
Attorney Docket Number	503.35255VX2		
Sheet	1	of	2

U.S. PATENT DOCUMENTS						
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Document Number		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		Number-Kind Code <sup>2</sup> (if known)				
		US-5,388,529	1995		Tieberghien et al.	
		US-5,979,742	1999		Enomoto et al.	
		US-3,849,871	1974		Kaunitz	
		US-5,794,835	1998		Colligan, et al.	
		US-5,460,317	1995		Thomas, et al.	
		US-5,140,913	1982		Takeichi, et al.	
		US-5,098,007	1992		Tsuruda, et al.	
		US-				
		US-				
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FOREIGN PATENT DOCUMENTS							
Examiner Initials <sup>1</sup>	Cite No. <sup>1</sup>	Foreign Patent Document		Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear	T <sup>6</sup>
		Country Code <sup>2</sup>	Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)				
		JP	57-112813	1980			
		JP	54-11250	1979			
		JP	7-266068	1995			
		JP	10-216964	1998			
		JP	60-166177	1985			
		JP	51-111925	1975			
		JP	6-156272	1994			
		JP	7-33016	1996			
		JP	0 579 500 A1	1994			
		WO	93/10935	1993			
		JP	7-505090	1995			
		JP	6-106661	1994			

Examiner Signature		Date Considered	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>See Kinds Codes of USPTO Patent Documents at [www.uspto.gov](http://www.uspto.gov) or MPEP 901.04. <sup>3</sup>Enter Office that issued the document, by the two-letter code (WIPO Standard St.3). <sup>4</sup>For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST. 16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449B/PTO  <b>INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>  <i>(use as many sheets as necessary)</i>		<b>Complete if Known</b>	
		Application Number	Not Assigned Yet
		Filing Date	On even date herewith
		First Named Inventor	AOTA, KINYA
		Group Art Unit	3635
		Examiner Name	R. Canfield
Sheet 2	of 2	Attorney Docket Number	503.35255VX2

OTHER PRIOR ART—NON PATENT LITERATURE DOCUMENTS			
Examiner Initials*	Cite No. <sup>1</sup>	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T <sup>2</sup>
		Friction Stir Process Welds Aluminum Alloys, Welding Journal, American Welding Society, Vo. 75, No. 3 (1996)	
		Light Metal Welding Vol. 33, No. 7, pp. 19-26 (1995)	
		Two Prints dated June 23, 1993 showing details from a video from the Welding Institute	
		Verksstadnera Nr 2, pp. 32 and 34 (1996)	
		Advanced Materials & Processes, pp. 22-23, (1993)	
		Metalworking Technology Europe, Sterline Publication, pp. 143-145, (1994)	
		An Introduction to Friction Stir Welding and its Development, by CJ Dawes, Welding & Metal Fabrication, pp. 13-16, (1995)	
	✓	Welding and Material Fabrication, January 1995, Vol. 63, No. 1 (front page, page 1 (contents), pages 13-16)	✓
		Verk Standerna (front page, page 3 (table for contents), page 5, pages 32-34)	
	✓	Svenstsaren, Vol. No. 3, 1995 (front page, contents, pages 5-6)	
	✓	Light Metal Vehicle Committee Report, 1978-83, 7-15-1984 (front page, pp. 194-5, colophon page, back pages)	
	✓	27 <sup>th</sup> ISATA (1994), pages 422-31	
		Welding Operation Management Safety Sanitation, 5-10-1978 (front page, content page, pp. 26-7, colophon page)	

Examiner Signature		Date Considered	
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<sup>1</sup>Applicant's unique citation designation number (optional). <sup>2</sup>Applicant is to place a check mark here if English language Translation is attached.

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